

Data to Maps (D2M): A Hands-on Workshop -

Locally-led watershed projects need to be able to demonstrate what the water quality data of their local area is in order to attract support. Being able to show people where the problems are in the watershed is an important tool for building public support. Smaller organizations tend to be more focused on implementation and may not have the available personnel expertise or technology to pull together sampling results in a way to clearly demonstrate the water quality of their watershed.

To address this need, working with local watershed groups, USEPA Region 5 developed Data2Maps (D2M). D2M is a custom Excel application in which users can overlay their sampling data on static maps and do preliminary assessment and analyses. The outputs can be printed directly from D2M or pasted into other applications (e.g., PowerPoint, MSWord) for outreach and reporting materials.

D2M requires a one-time set up for a given project (approximately 1-2 working days by an advanced Excel user). Because the set-up time is directly related to the number of sampling sites, D2M is best suited for projects with pre-determined and limited (less than 15) sampling locations. Once the application has been customized, a basic-level Excel user can maintain the application by simply pasting in the monitoring data. The data can then be queried by parameter and by year, and D2M will display the results as:

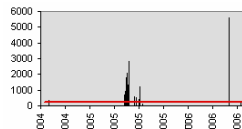
Maps

Maps/images provide geographic context while color-coded sampling locations show how often a standard has been exceeded



Charts

Histograms of data, along with standard/threshold line to show frequency and extent of exceedances



Numerical Summaries

Simple statistics and list of individual data points by sampling location.

n: 27
avg: 962.22
st dev: 1122.68
% exceed: 89%

data pts > 235 cfu/100 ml
24

Site	Year	Date	E. coli
2	2004	9/14/2004	360
2	2005	6/21/2005	700
2	2005	6/22/2005	0
2	2005	6/23/2005	600

In this Workshop

After seeing a general overview of the D2M application, participants will have the opportunity to customize a D2M template for a specific project. We encourage participants who have a project they'd like set up in D2M to bring the materials listed below. For participants who do not have a specific project, we will supply example materials so that everyone can have hands-on experience. We will also have a discussion on presenting visual data for various audiences.

Materials to Bring (if you want to work on a specific project) electronic versions of the following:

- List of the sampling parameters and, if available, units and relevant standard/thresholds
- List of the site names and x,y coordinates, preferably unprojected (lat/longs).
- file image(s) of map(s) which display the sampling locations as reference. A guide for creating these images is attached (*Include Appendix B*) . For assistance in preparation of maps, please contact Janice Huang.

Course Instructors

Cyd Curtis 312 353-6959 curtis.cynthia@epa.gov

Janice Huang 312 353-8228 huang.janice@epa.gov

Thomas Davenport 312 886-0209 davenport.thomas@epa.gov